# TELEFUNKEN SERVICE

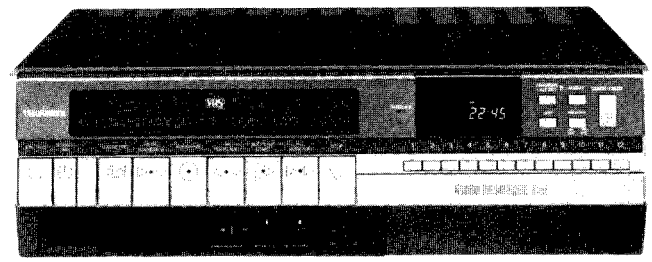
AUDIOVISION
AUDIOVISION
AUDIOVISUEL

## Videorecorder 925 U/930 U

**Bestell-Nr. 319 484 066 PG I**

**Stromlaufpläne · Lagepläne Ersatzteile**

**Schematic Diagrams · Component Layouts · Spare Parts**



930 U = Typ C
925 U = Typ D

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**Hinweis:**
Diese Schaltbilder sind in Verbindung mit den Service-Informationen für die Video-Recorder 925–950 zu verwenden.

| | |
|---|---|
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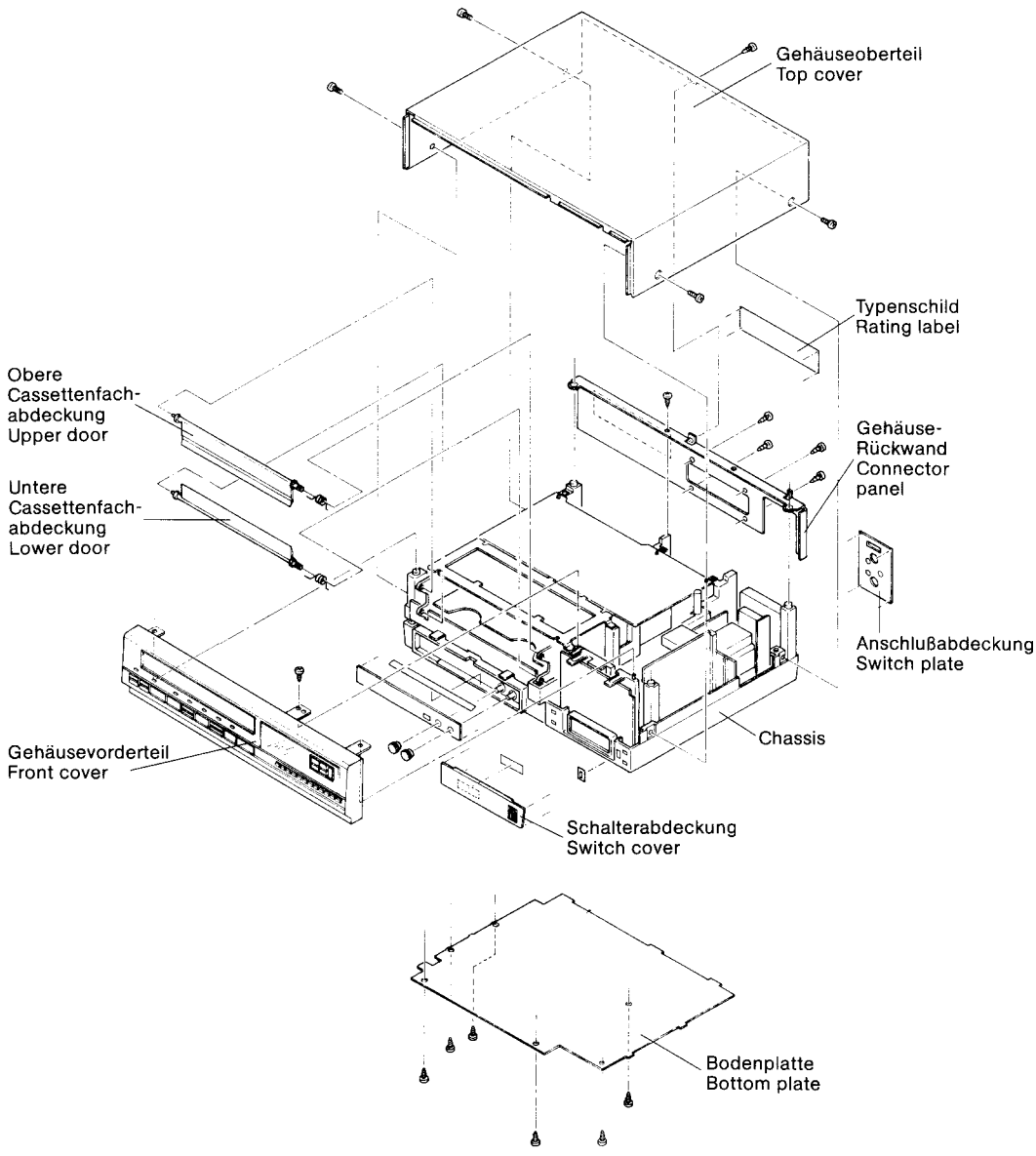
**Note:**
These circuit diagrams are to be used in conjunction with the Service Instructions for Video Recorder 925–950

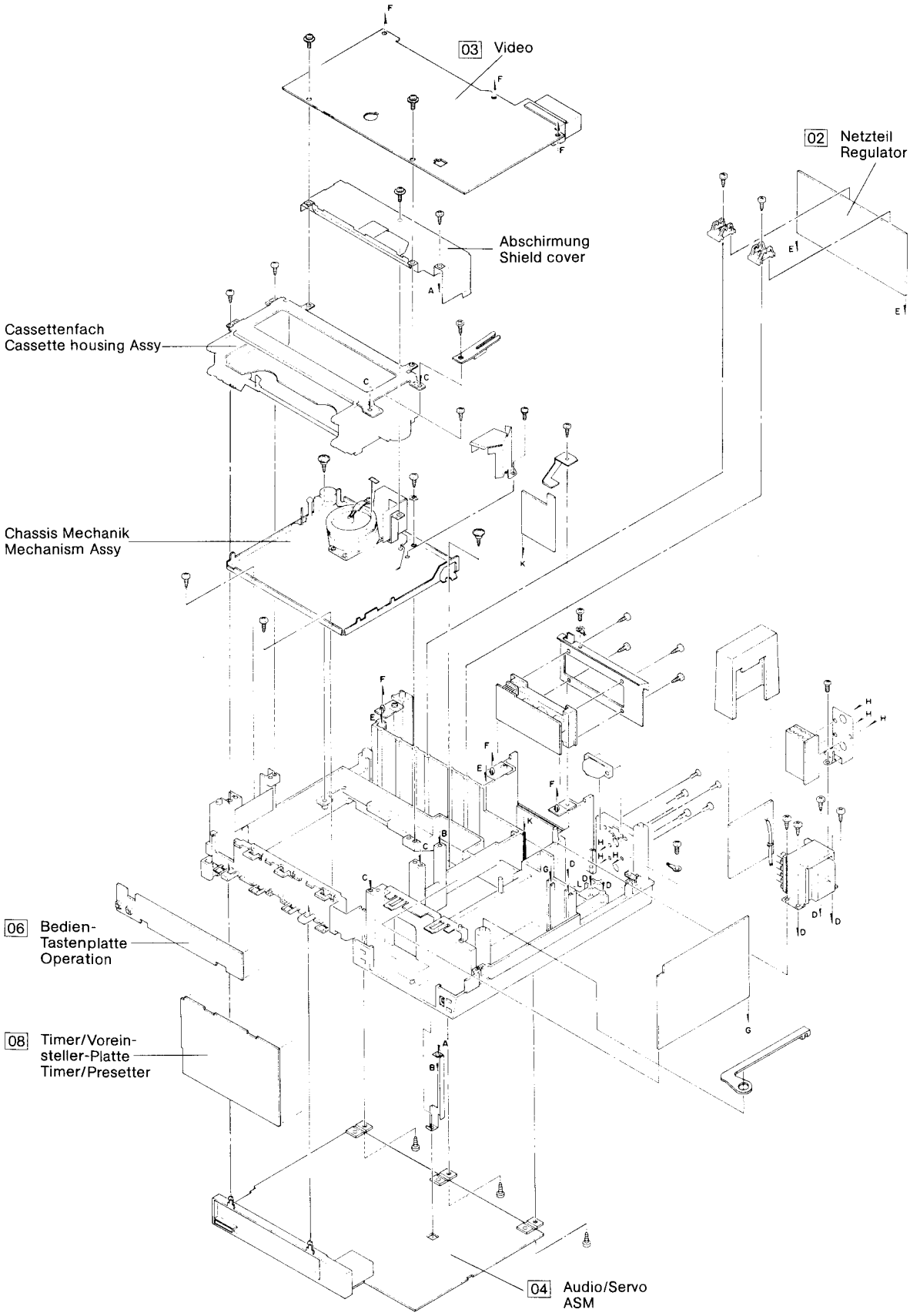
| | |
|---|---|
| Circuit Diagrams, Component Layouts | – 319 478 870 |
| Adjustments | – 319 478 871 |
| Description | – 319 478 872 |




Ausbauhinweise siehe Vorgängermodelle unter Hinweis auf dem Deckblatt dieser Ergänzung.

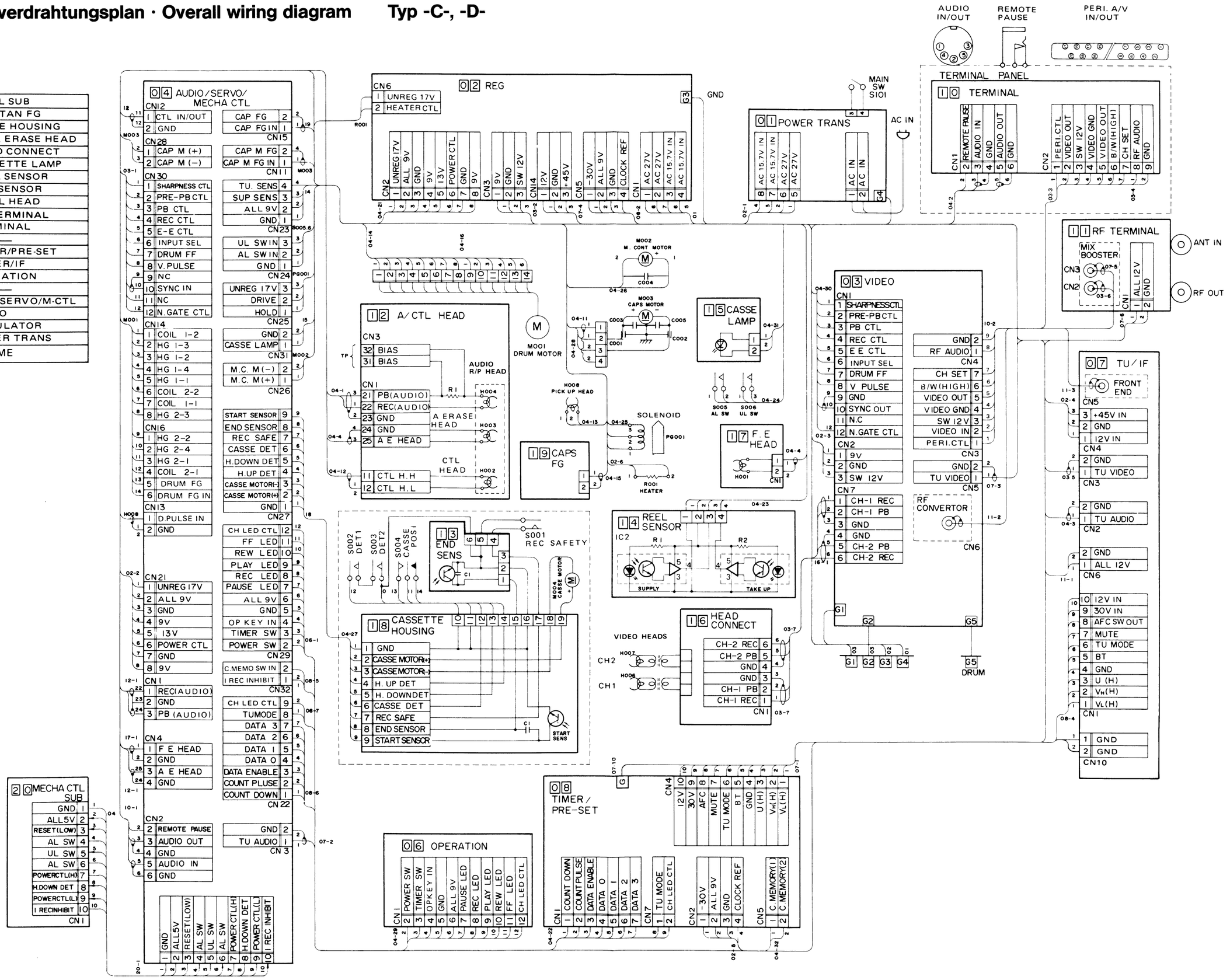
Disassembly look earlies types with reference to the notice of the change sheet of this completion.

# Lage der Leiterplatten Typ -C-, -D- Circuit board assemblies



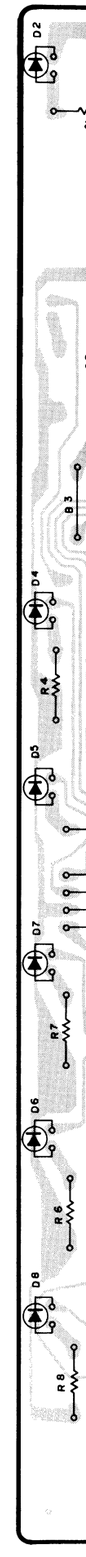
# Gesamtverdrahtungsplan · Overall wiring diagram Typ -C-, -D-

| NO | NAME |
|---|---|
| 20 | M-CTL SUB |
| 19 | CAPSTAN FG |
| 18 | CASSE HOUSING |
| 17 | FULL ERASE HEAD |
| 16 | HEAD CONNECT |
| 15 | CASSETTE LAMP |
| 14 | REEL SENSOR |
| 13 | END SENSOR |
| 12 | A/CTL HEAD |
| 11 | RF TERMINAL |
| 10 | TERMINAL |
| 09 | — |
| 08 | TIMER/PRE-SET |
| 07 | TUNER/IF |
| 06 | OPERATION |
| 05 | — |
| 04 | AUD/SERVO/M-CTL |
| 03 | VIDEO |
| 02 | REGULATOR |
| 01 | POWER TRANS |


04 AUDIO/SERVO/MECHA CTL
CN12 CTL IN/OUT, GND
CN28 CAP M (+), CAP M (-)
CN30 SHARPNESS CTL, PRE-PB CTL, PB CTL, REC CTL, E-E CTL, INPUT SEL, DRUM FF, V.PULSE, NC, SYNC IN, NC, N.GATE CTL
CN14 COIL 1-2, HG 1-3, HG 1-2, HG 1-4, HG 1-1, COIL 2-2, COIL 1-1, HG 2-3
CN16 HG 2-2, HG 2-4, HG 2-1, COIL 2-1, DRUM FG, DRUM FG IN
CN13 D.PULSE IN, GND
CN21 UNREG 17V, ALL 9V, GND, 9V, 13V, POWER CTL, GND, 9V
CN1 REC(AUDIO), GND, PB (AUDIO)
CN4 F E HEAD, GND, A E HEAD, GND
CN2 REMOTE PAUSE, AUDIO OUT, GND, AUDIO IN, GND
CAP FG, CAP FG IN (CN15)
CAP M FG, CAP M FG IN (CN11)
TU. SENS, SUP SENS, ALL 9V, GND (CN23)
UL SWIN, AL SWIN, GND (CN24)
UNREG 17V, DRIVE, HOLD (CN25)
GND, CASSE LAMP (CN31)
M.C. M(-), M.C. M(+) (CN26)
START SENSOR, END SENSOR, REC SAFE, CASSE DET, H.DOWN DET, H.UP DET, CASSE MOTOR(-), CASSE MOTOR(+), GND (CN27)
CH LED CTL, FF LED, REW LED, PLAY LED, REC LED, PAUSE LED, ALL 9V, GND, OP KEY IN, TIMER SW, POWER SW (CN29)
C.MEMO SW IN, I REC INHIBIT (CN32)
CH LED CTL, TUMODE, DATA 3, DATA 2, DATA 1, DATA 0, DATA ENABLE, COUNT PLUSE, COUNT DOWN (CN22)
GND, TU AUDIO (CN 3)
20 MECHA CTL SUB
GND, ALL5V, RESET(LOW), AL SW, AL SW, UL SW, AL SW, POWERCTL(H), H.DOWN DET, POWERCTL(L), I RECINHIBIT (CN1)
02 REG
CN6 UNREG 17V, HEATER CTL
CN2 UNREG 17V, ALL 9V, GND, 9V, 13V, POWER CTL, GND, 9V
CN3 9V, GND, SW 12V
CN14 12V, GND, +45V
CN5 -30V, ALL 9V, GND, CLOCK REF
CN1 AC 27V, AC 27V, AC 15.7V IN, AC 15.7V IN
01 POWER TRANS
AC 15.7V IN, AC 15.7V IN, AC 27V, AC 27V
AC IN, AC IN
MAIN SW SIO1
AC IN
AUDIO IN/OUT
REMOTE PAUSE
PERI. A/V IN/OUT
10 TERMINAL PANEL
CN1 REMOTE PAUSE, AUDIO IN, GND, AUDIO OUT, GND
CN2 PERI.CTL, VIDEO OUT, SW 12V, VIDEO GND, VIDEO OUT, B/W(HIGH), CH SET, RF AUDIO, GND
11 RF TERMINAL
MIX BOOSTER
CN3, CN2, CN1 ALL 12V, GND
ANT IN
RF OUT
03 VIDEO
CN1 SHARPNESSCTL, PRE-PBCTL, PB CTL, REC CTL, E E CTL, INPUT SEL, DRUM FF, V PULSE, GND, SYNC OUT, N.C, N.GATE CTL
CN2 9V, GND, SW 12V
CN7 CH-1 REC, CH-1 PB, GND, GND, CH-2 PB, CH-2 REC
CN4 GND, RF AUDIO, CH SET, B/W(HIGH), VIDEO OUT, VIDEO GND, SW 12V, VIDEO IN, PERI.CTL
CN3 GND, TU VIDEO
CN5
RF CONVERTOR
CN6
G1 G2 G3 G4 G5 DRUM
07 TU/IF
FRONT END
CN5 +45V IN, GND, 12V IN
CN4 GND, TU VIDEO
CN3 GND, TU AUDIO
CN2 GND, ALL 12V
CN6 12V IN, 30V IN, AFC SW OUT, MUTE, TU MODE, BT, GND, U (H), VH(H), VL(H)
CN1 GND, GND
CN10
12 A/CTL HEAD
CN3 BIAS, BIAS
AUDIO R/P HEAD
CN1 PB(AUDIO), REC(AUDIO), GND, GND, A E HEAD
A ERASE HEAD
CTL HEAD
CTL H.H, CTL H.L
M001 DRUM MOTOR
M002 M. CONT MOTOR
M003 CAPS MOTOR
H004 PICK UP HEAD
15 CASSE LAMP
S005 AL SW
S006 UL SW
17 F.E HEAD
19 CAPS FG
SOLENOID
ROO1 HEATER
13 END SENS
S001 REC SAFETY
S002 DET1
S003 DET2
S004 CASSE POSI
M004 CASSE MOTOR
14 REEL SENSOR
IC2 R1 R2
SUPPLY
TAKE UP
18 CASSETTE HOUSING
GND, CASSE MOTOR(+), CASSE MOTOR(-), H. UP DET, H. DOWNDET, CASSE. DET, REC SAFE, END SENSOR, START SENSOR
START SENS
16 HEAD CONNECT
VIDEO HEADS
CH2 H007
CH1 H008
CH-2 REC, CH-2 PB, GND, GND, CH-1 PB, CH-1 REC (CN1)
08 TIMER/PRE-SET
CN4 12V, 30V, AFC, MUTE, TU MODE, BT, GND, U (H), VH(H), VL(H)
06 OPERATION
CN1 POWER SW, TIMER SW, OPKEY IN, GND, ALL 9V, PAUSE LED, REC LED, PLAY LED, REW LED, FF LED, CH LED CTL
CN7 TU MODE, CH LED CTL
CN2 -30V, ALL 9V, GND, CLOCK REF
CN5 C MEMORY(1), C MEMORY(2)
CN1 COUNT DOWN, COUNT PULSE, DATA ENABLE, DATA 0, DATA 1, DATA 2, DATA 3



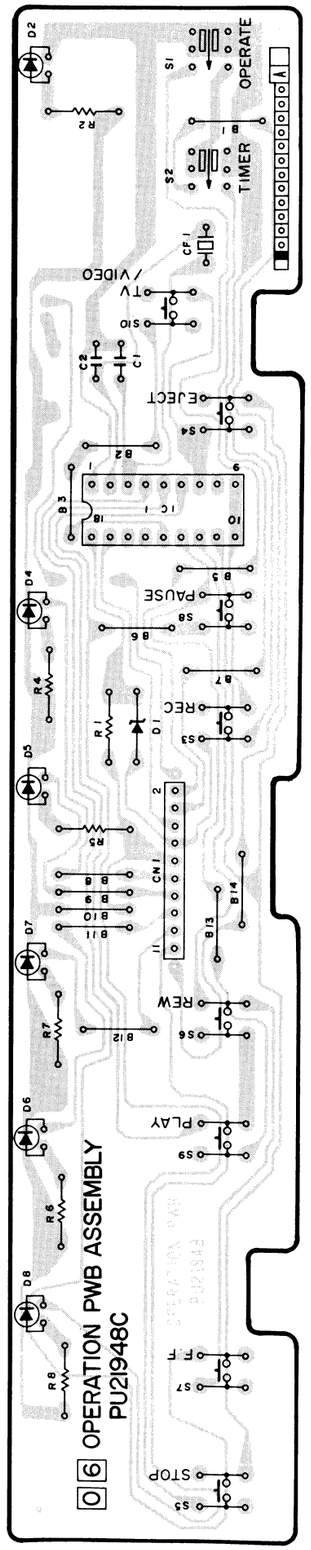




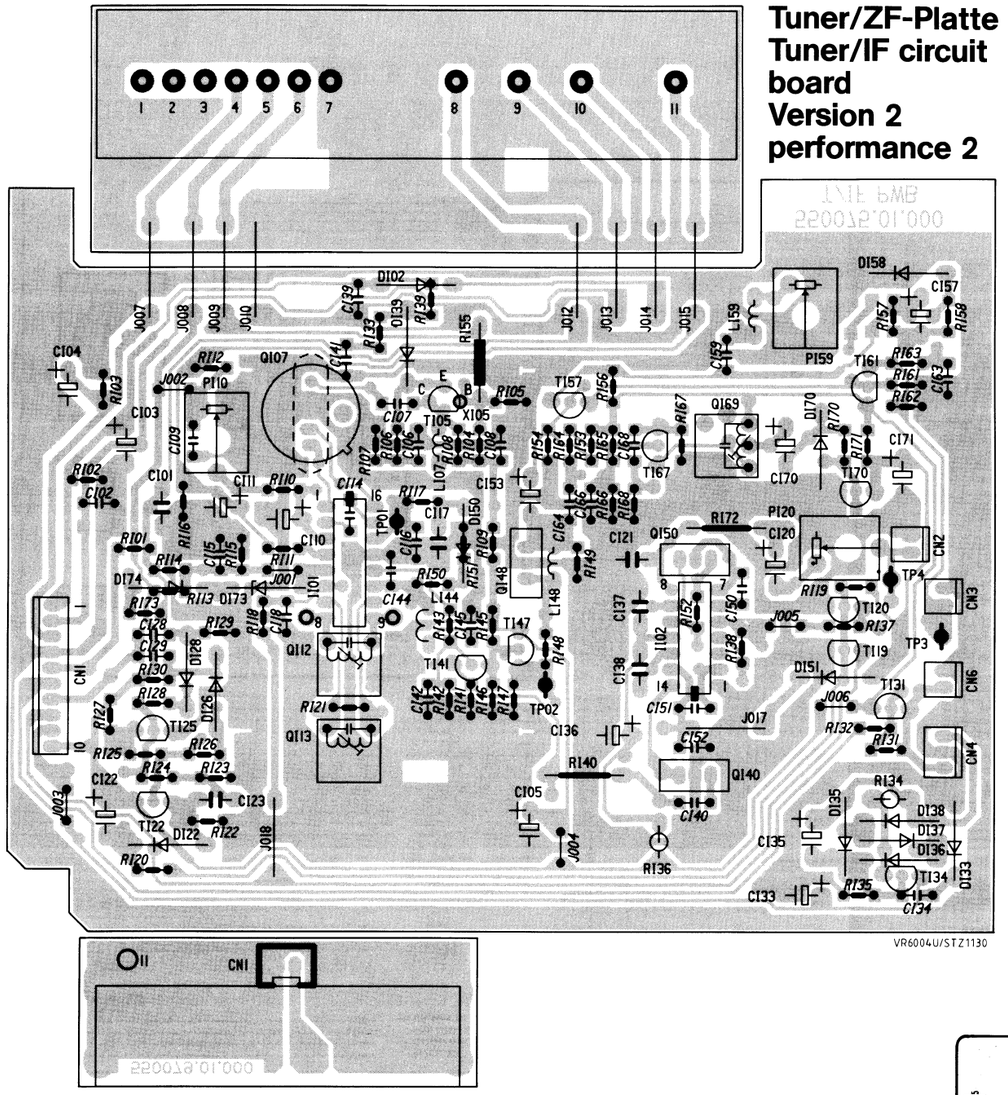
Bedientastenplatte · Operation circuit board Typ -C-, -D-

## Bedientastenplatte · Operation circuit board

Typ -C-, -D-



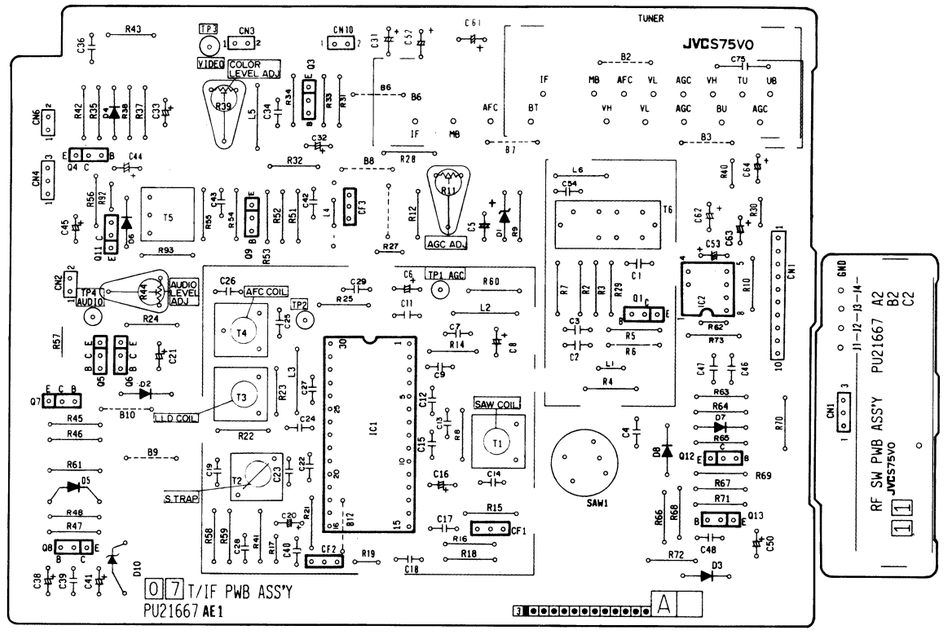

## Tuner/ZF-Platte Tuner/IF circuit board Version 2 performance 2







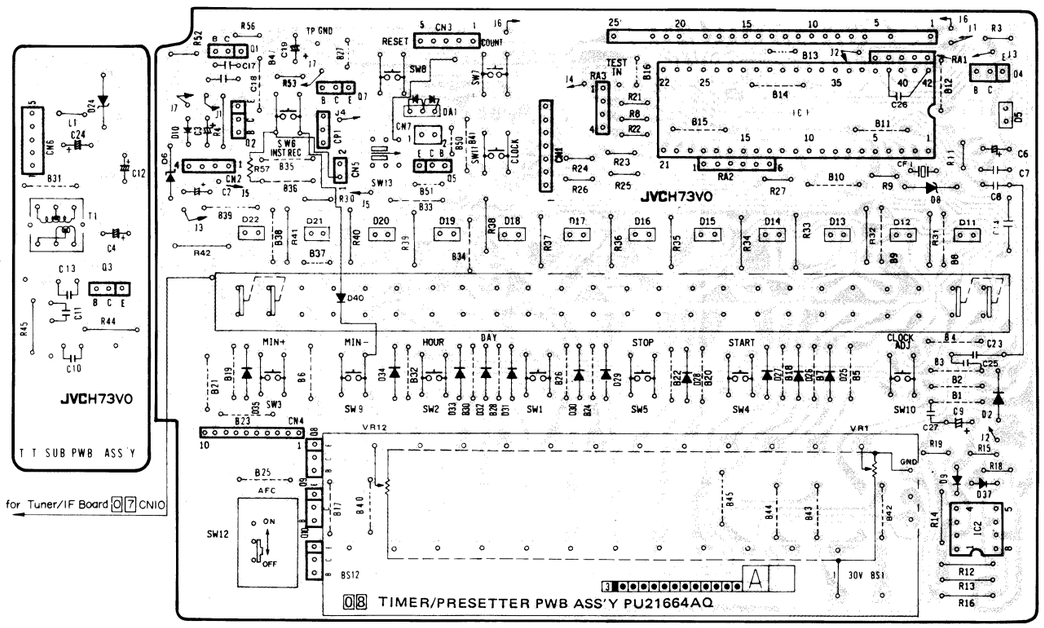

## Tuner/ZF-Platte · Tuner/IF circuit board Version 1 performance 1



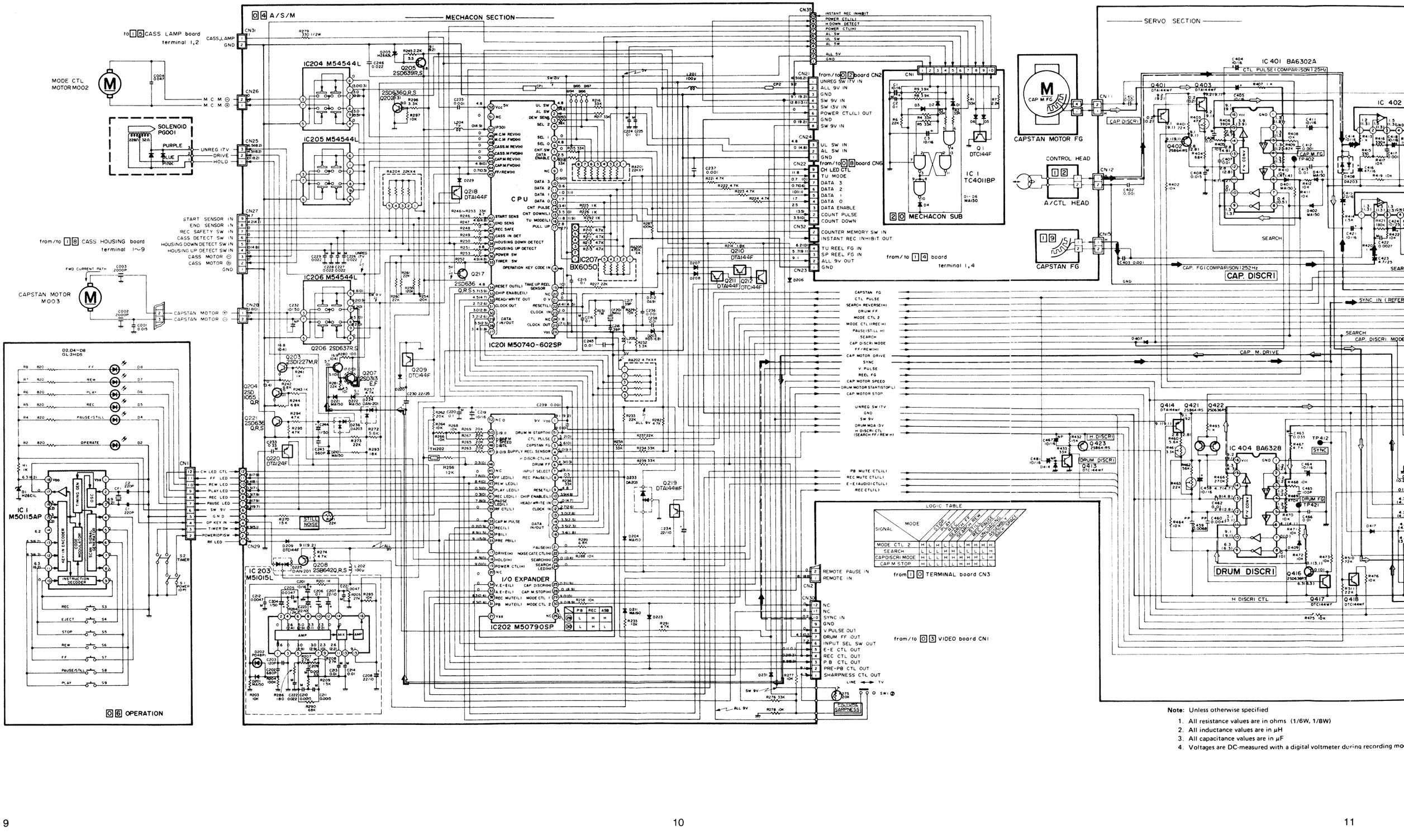



Typ -C-, -D-

## Timer/Voreinsteller-Platte · Timer/Presetter circuit board

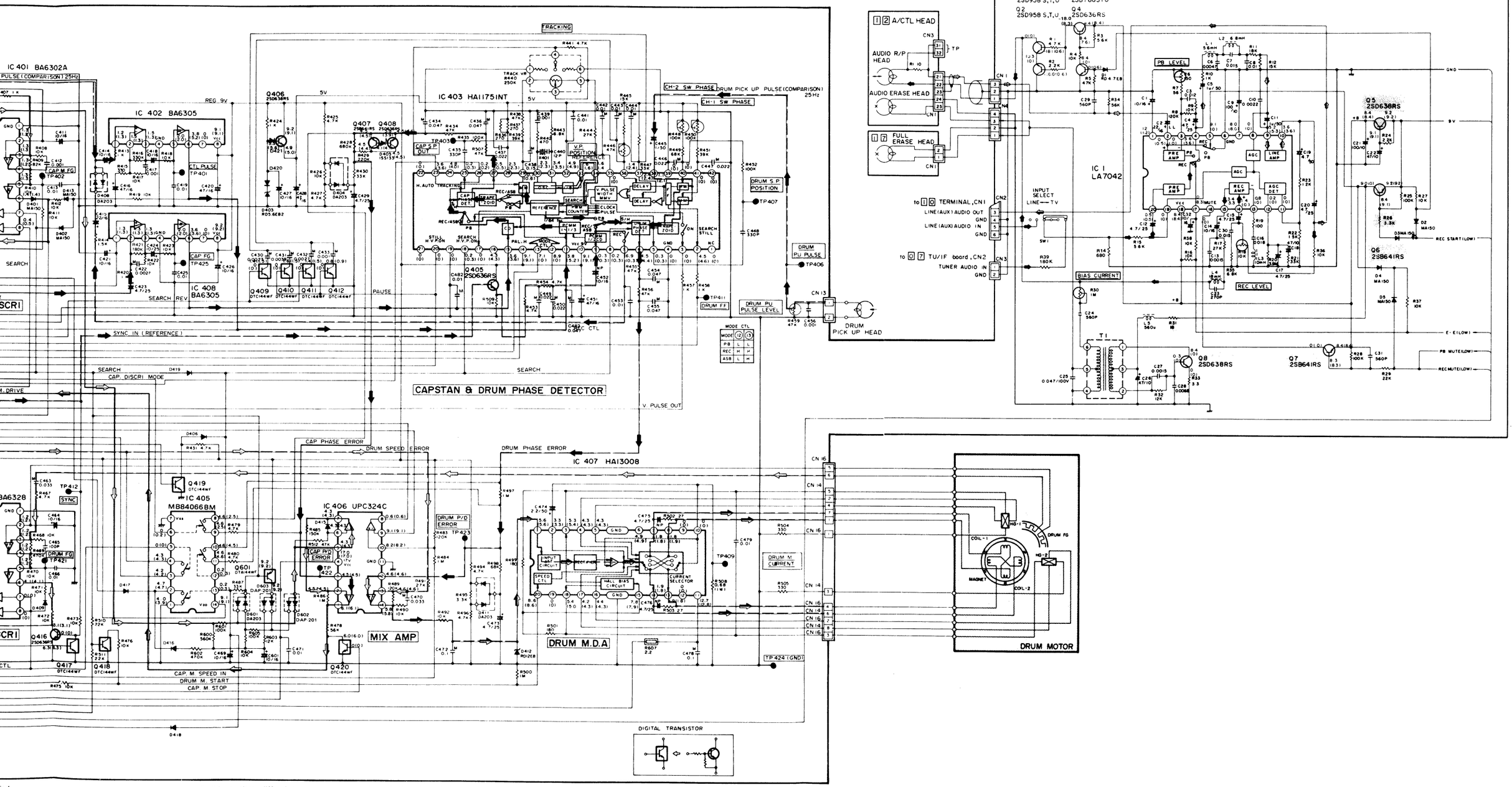


# Schaltbild Audio, Servo, Mechacon
# Audio/Servo/Mechacon Sub, Operation Circuits schematic diagram Typ -C-




**Note:** Unless otherwise specified

1. All resistance values are in ohms (1/6W, 1/8W)
2. All inductance values are in μH
3. All capacitance values are in μF
4. Voltages are DC-measured with a digital voltmeter during recording mo

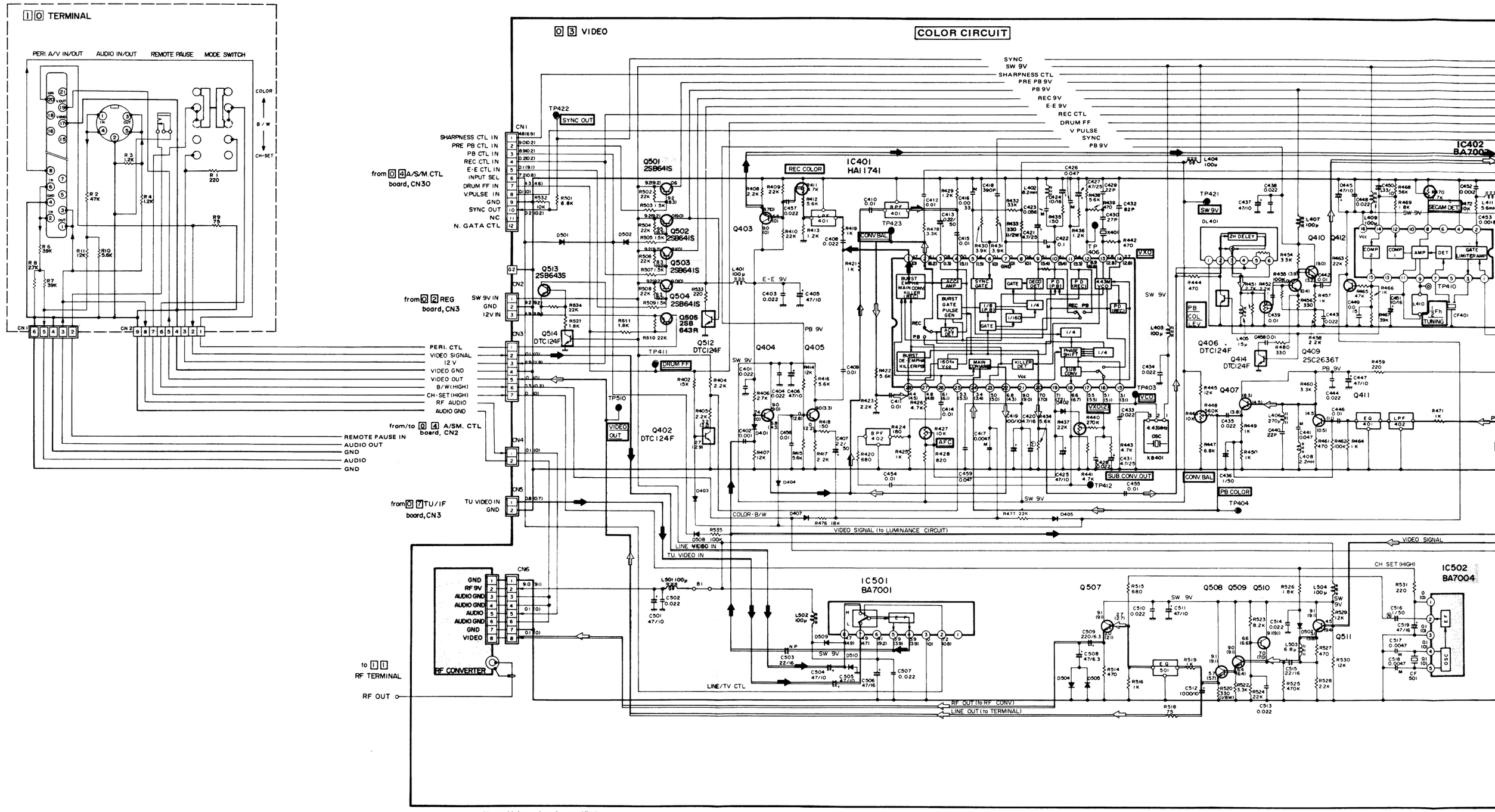



ied
in ohms (1/6W, 1/8W)
re in μH
re in μF
ed with a digital voltmeter during recording mode

5. Where voltage differs between recording and playback, the voltage during playback is shown in parentheses
6. Shaded ( ) parts are critical for safety Replace only with specified part numbers
7. All diodes are 1SS133

| MODES / CONTROL SIGNAL | DRUM SERVO | | CAPSTAN SERVO | |
|---|---|---|---|---|
| | RECORDING | PLAYBACK | RECORDING | PLAYBACK |
| REFERENCE SIGNAL | V. SYNC | X'TAL | X'TAL | X'TAL |
| COMPARISON SIGNAL | DRUM PU PULSE | DRUM PU PULSE | CAPSTAN FG | CTL PULSE |

# Schaltbild Video
# Video Circuit schematic diagram Typ -C-, -D-



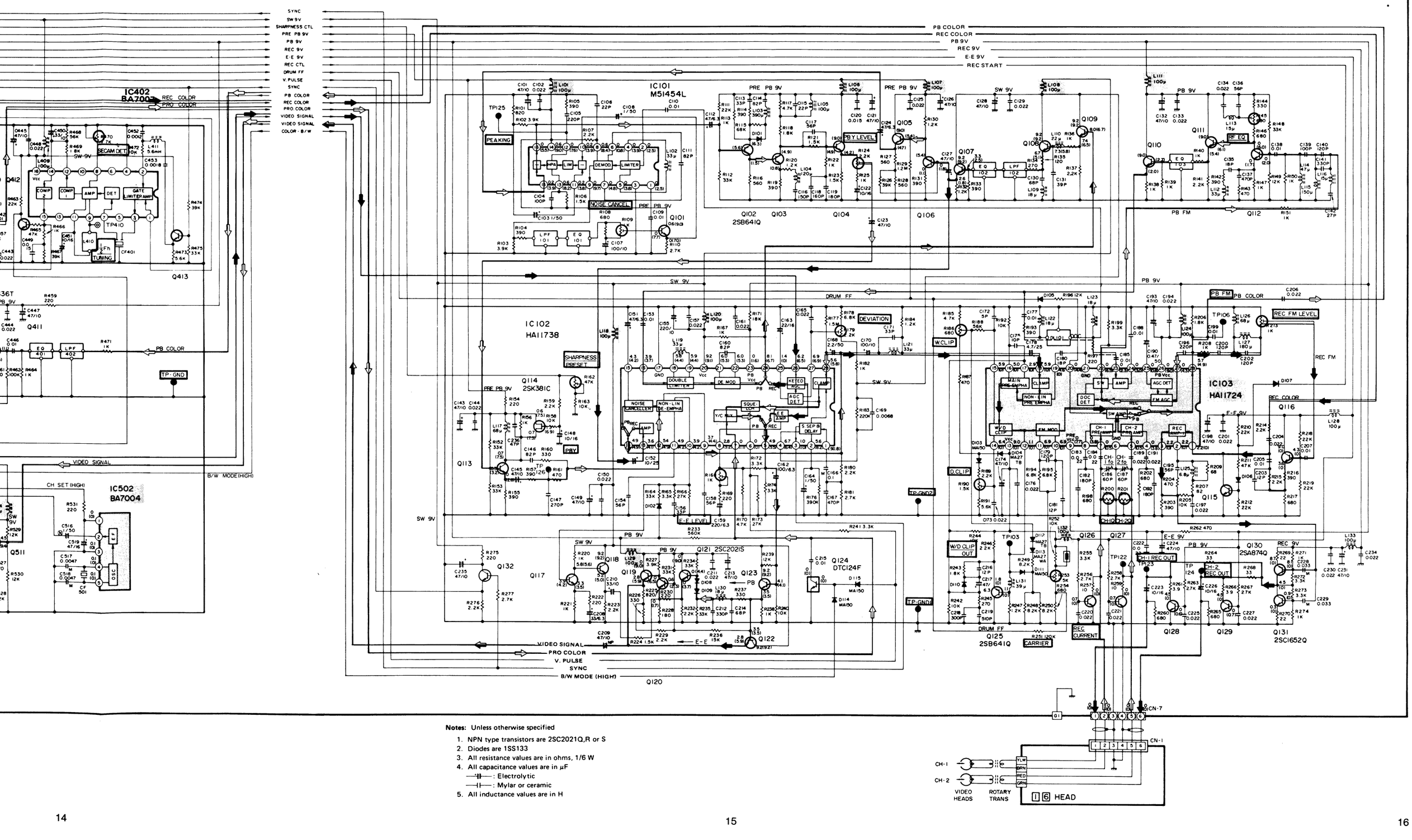

**Note:** Unless otherwise specified

1. All resistance values are in ohms. (1/6 W)
2. All inductance values are in μH
3. All capacitance values are in μF
4. Voltages are DC-measured with a digital voltmeter during recording mode
5. Where voltage differs between recording and playback, the voltage during playback is shown in parentheses
6. Shaded ( ) parts are critical for safety Replace only with specified part numbers.
7. All transistors are 2SC2021Q,R,S
8. All diodes are 1SS133

DIGITAL TRANSISTOR

RECORDING SIGNAL PATH
PLAYBACK SIGNAL PATH
REC PLAY SIGNAL PATH

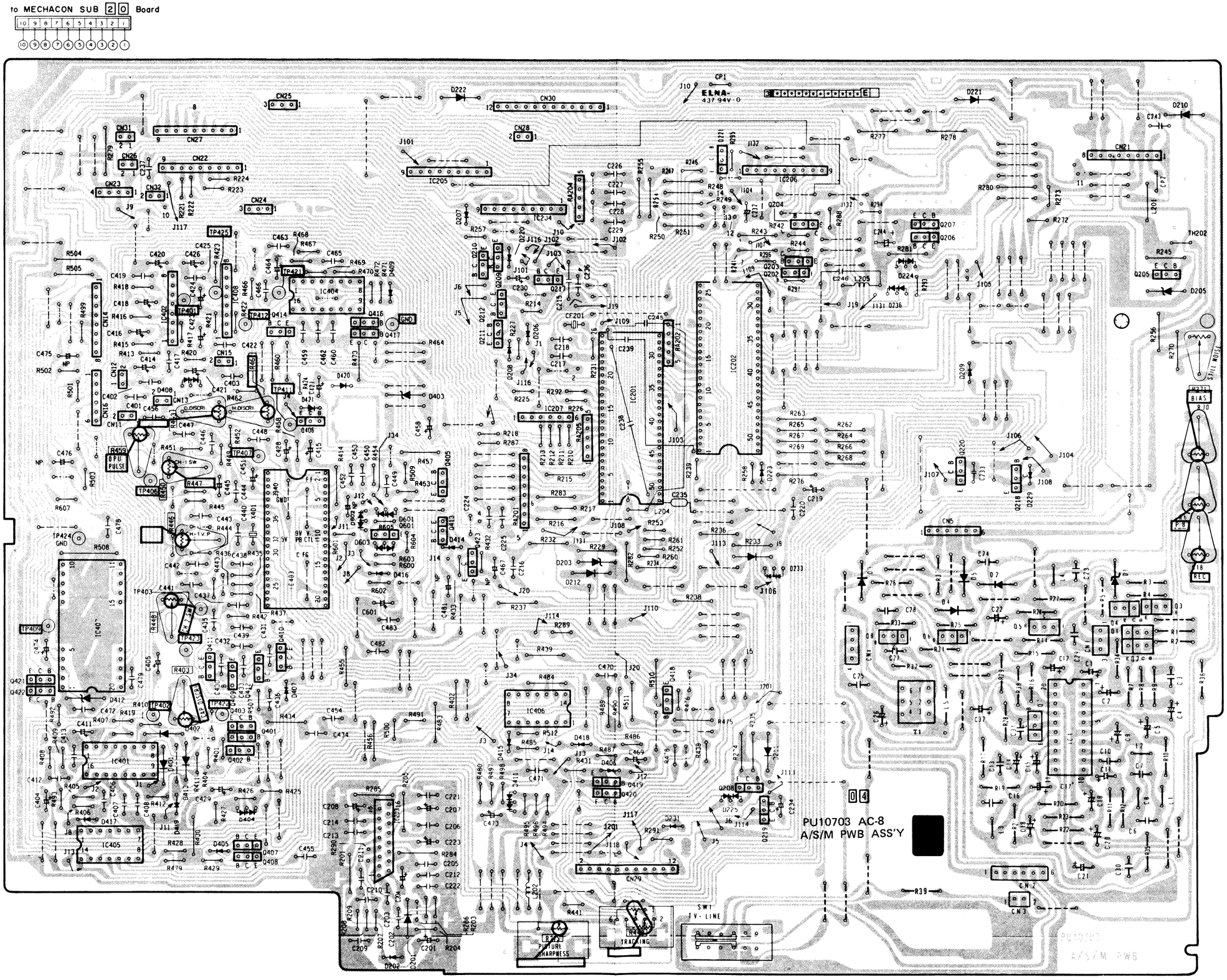
# LUMINANCE CIRCUIT



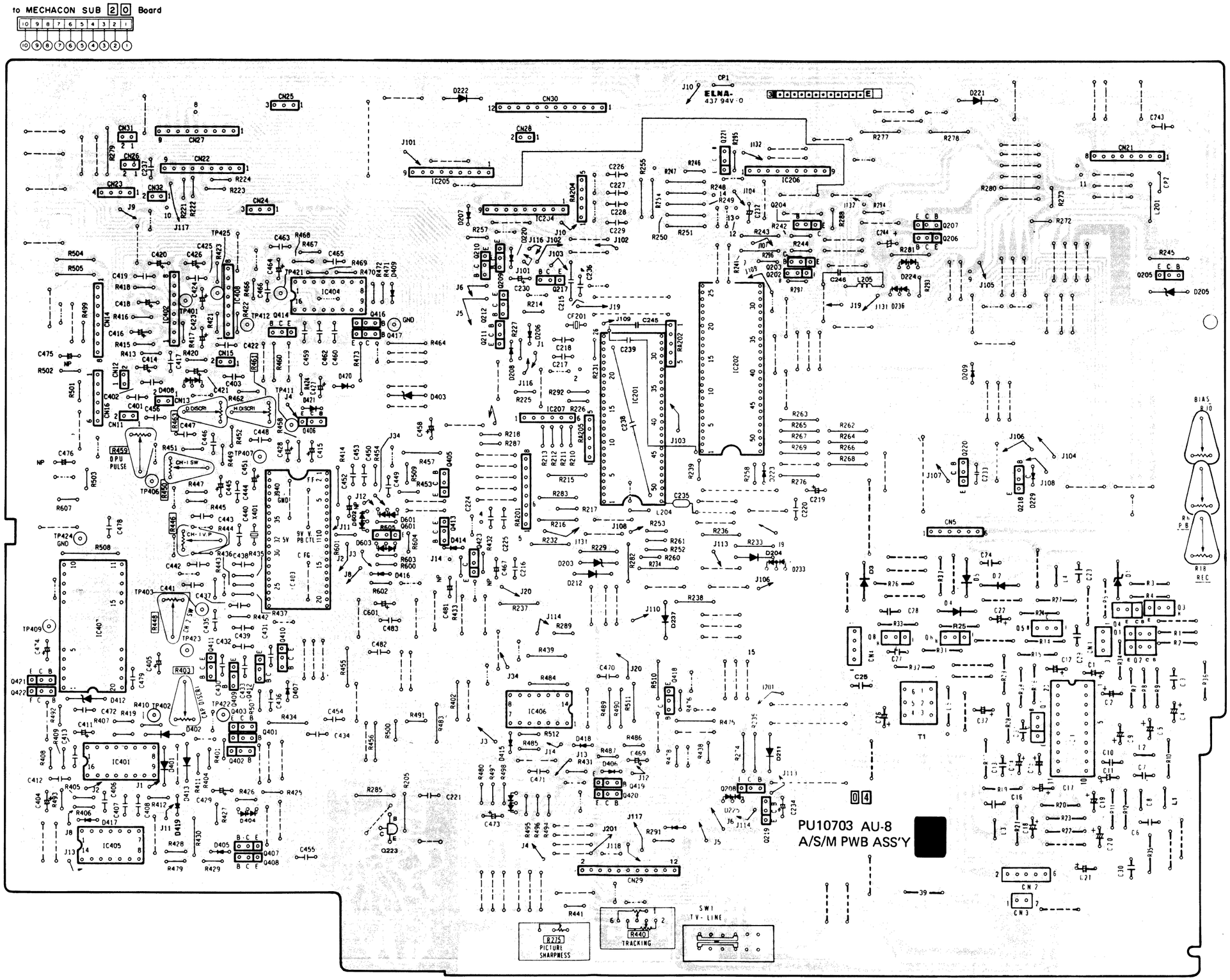

**Notes:** Unless otherwise specified

1. NPN type transistors are 2SC2021Q,R or S
2. Diodes are 1SS133
3. All resistance values are in ohms, 1/6 W
4. All capacitance values are in μF
   —‖— : Electrolytic
   —|— : Mylar or ceramic
5. All inductance values are in H

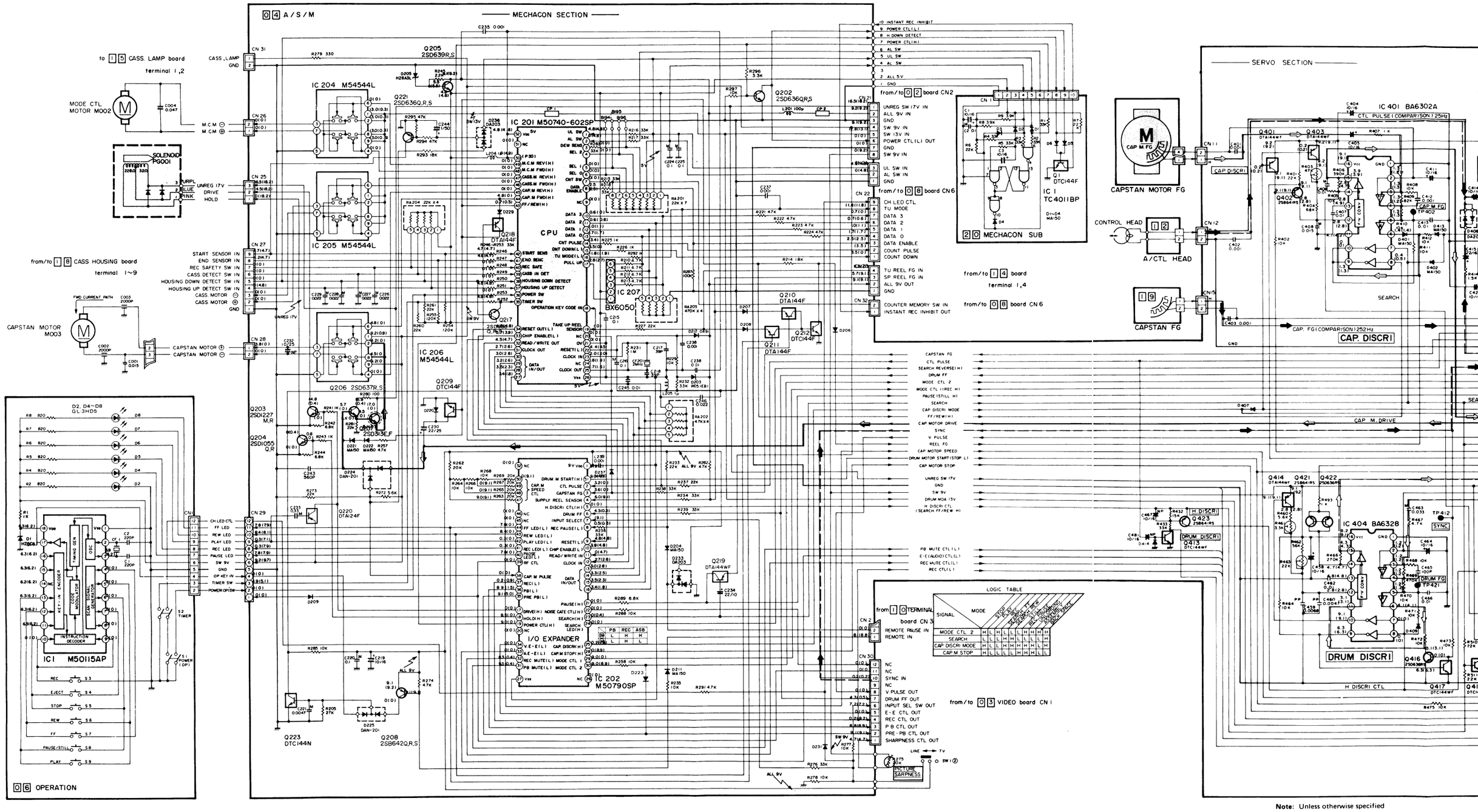
# Lageplan Audio/Servo/Mechacon-Platte
# Layout Audio/Servo/Mechacon circuit board Typ -C-



# Lageplan Audio/Servo/Mechacon-Platte
# Layout Audio/Servo/Mechacon circuit board Typ -D-

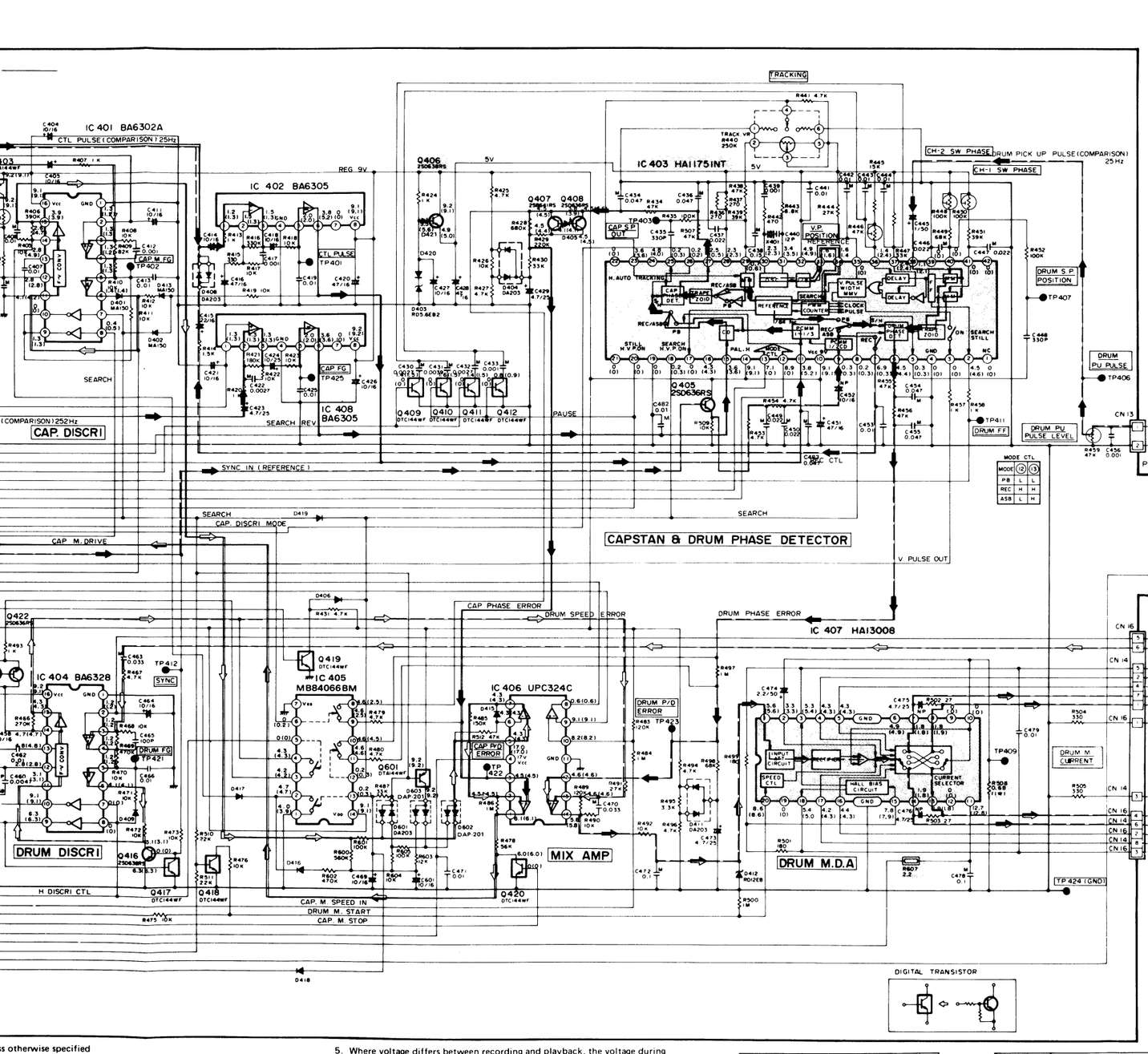


# Schaltbild Audio, Servo, Mechacon
# Audio/Servo/Mechacon, circuits schematic diagram Typ -D-

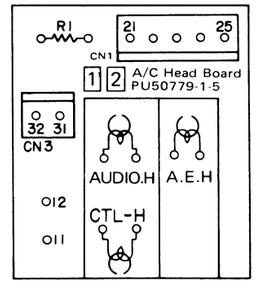



**Note:** Unless otherwise specified

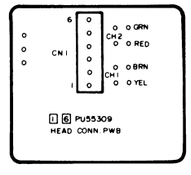
1. All resistance values are in ohms (1/6W, 1/8W)
2. All inductance values are in μH
3. All capacitance values are in μF
4. Voltages are DC-measured with a digital voltmeter duri




A/C head circuit board




Head conn. circuit board




s otherwise specified

sistance values are in ohms (1/6W, 1/8W)

ductance values are in μH

pacitance values are in μF

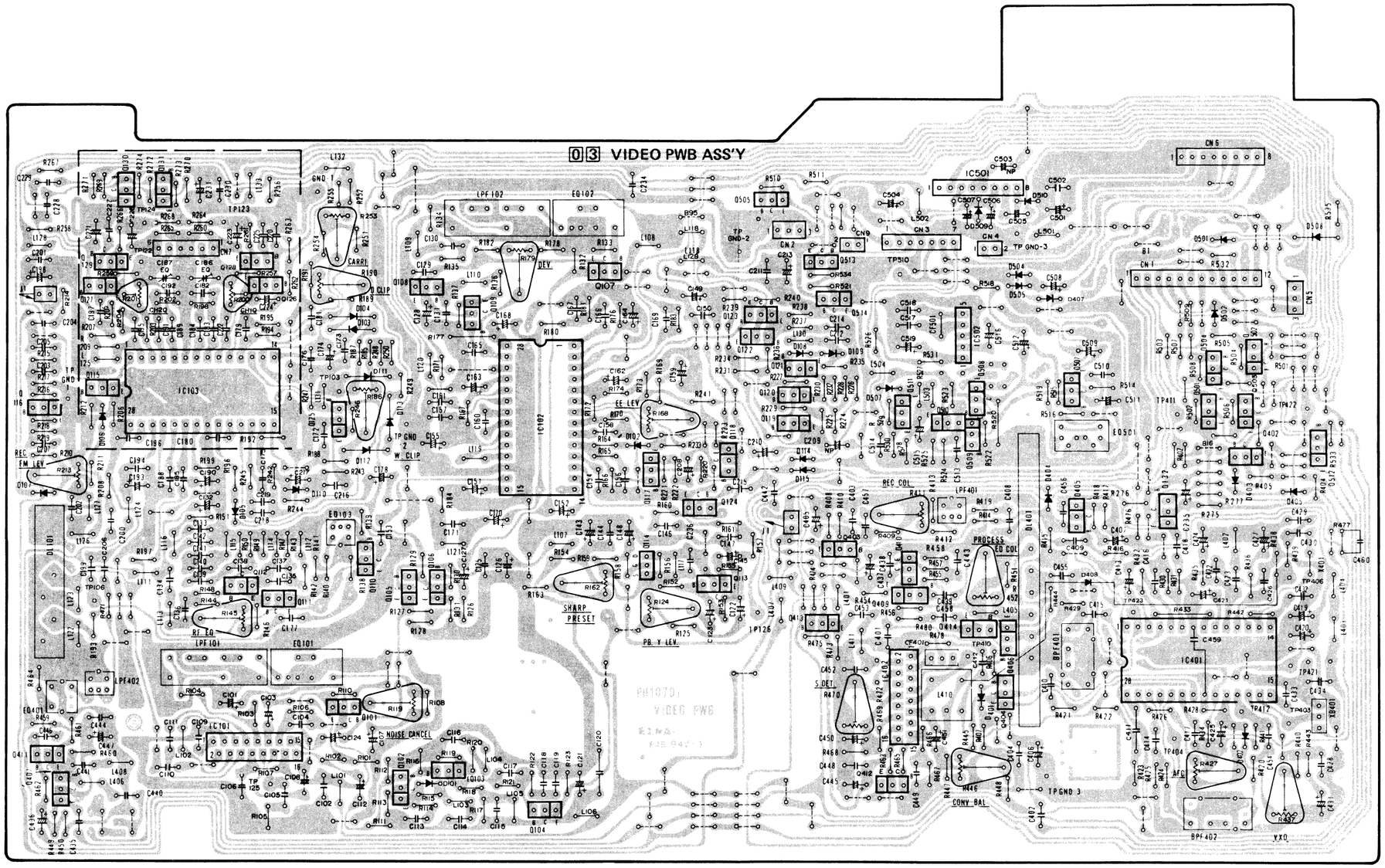
ges are DC-measured with a digital voltmeter during recording mode

5. Where voltage differs between recording and playback, the voltage during playback is shown in parentheses
6. Shaded ( ) parts are critical for safety Replace only with specified part numbers
7. All diodes are 1SS133

CAPSTAN PHASE ERROR
CAPSTAN SPEED ERROR
CAPSTAN ERROR
DRUM PHASE ERROR
DRUM SPEED ERROR
DRUM ERROR

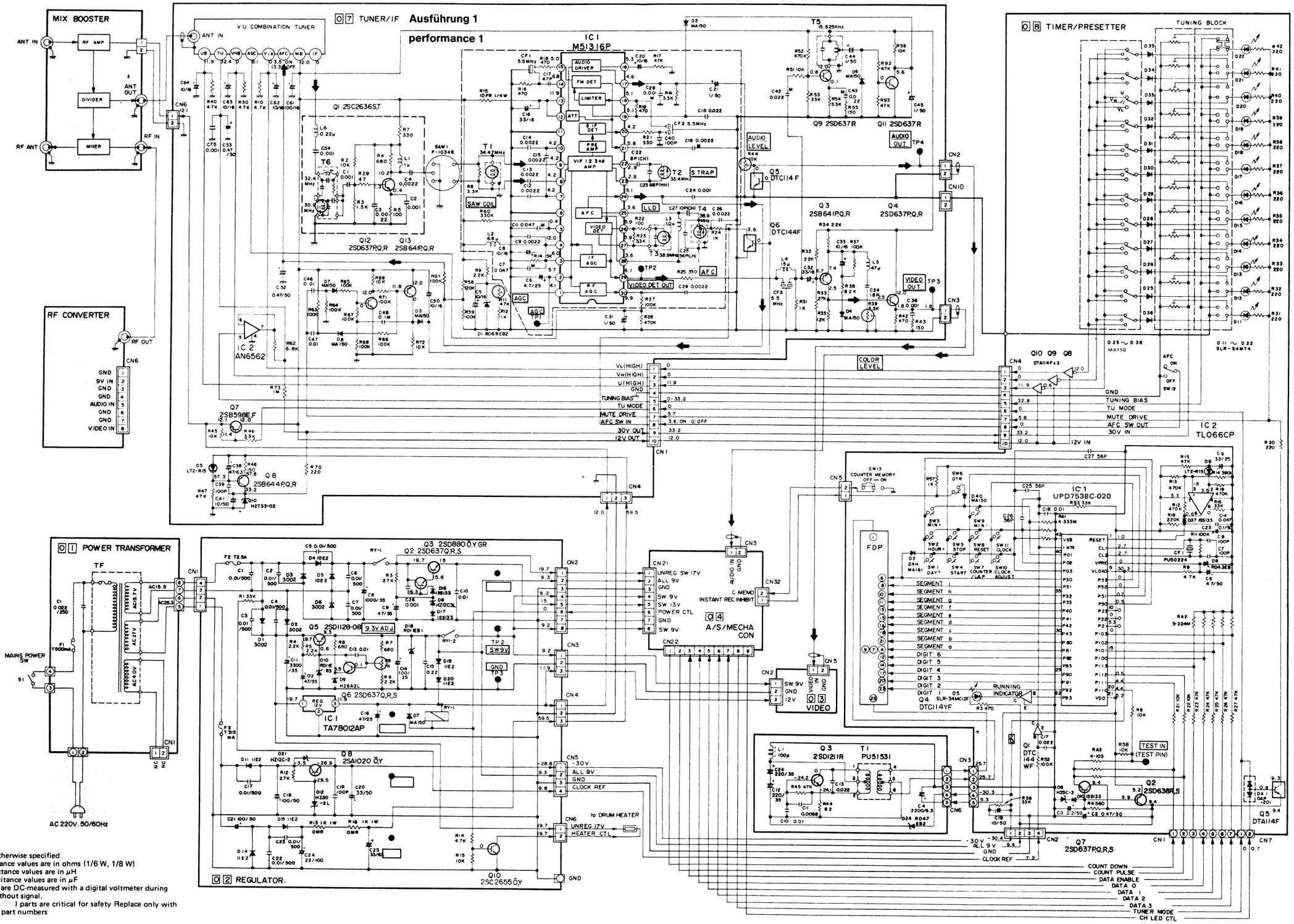
| MODES / CONTROL SIGNAL | DRUM SERVO | | CAPSTAN SERVO | |
|---|---|---|---|---|
| | RECORDING | PLAYBACK | RECORDING | PLAYBACK |
| REFERENCE SIGNAL | V. SYNC | X'TAL | X'TAL | X'TAL |
| COMPARISON SIGNAL | DRUM PU PULSE | DRUM PU PULSE | CAPSTAN FG | CTL PULSE |

## Lageplan Video-Platte
## Layout diagram Video-board Typ –C–, –D–



# Schaltbild Tuner/ZF Version 1, Timer/Voreinsteller, Netzteil
# Tuner/IF performance 1, Timer/Pre-setter, power trans & regulator circuits schematic diagram

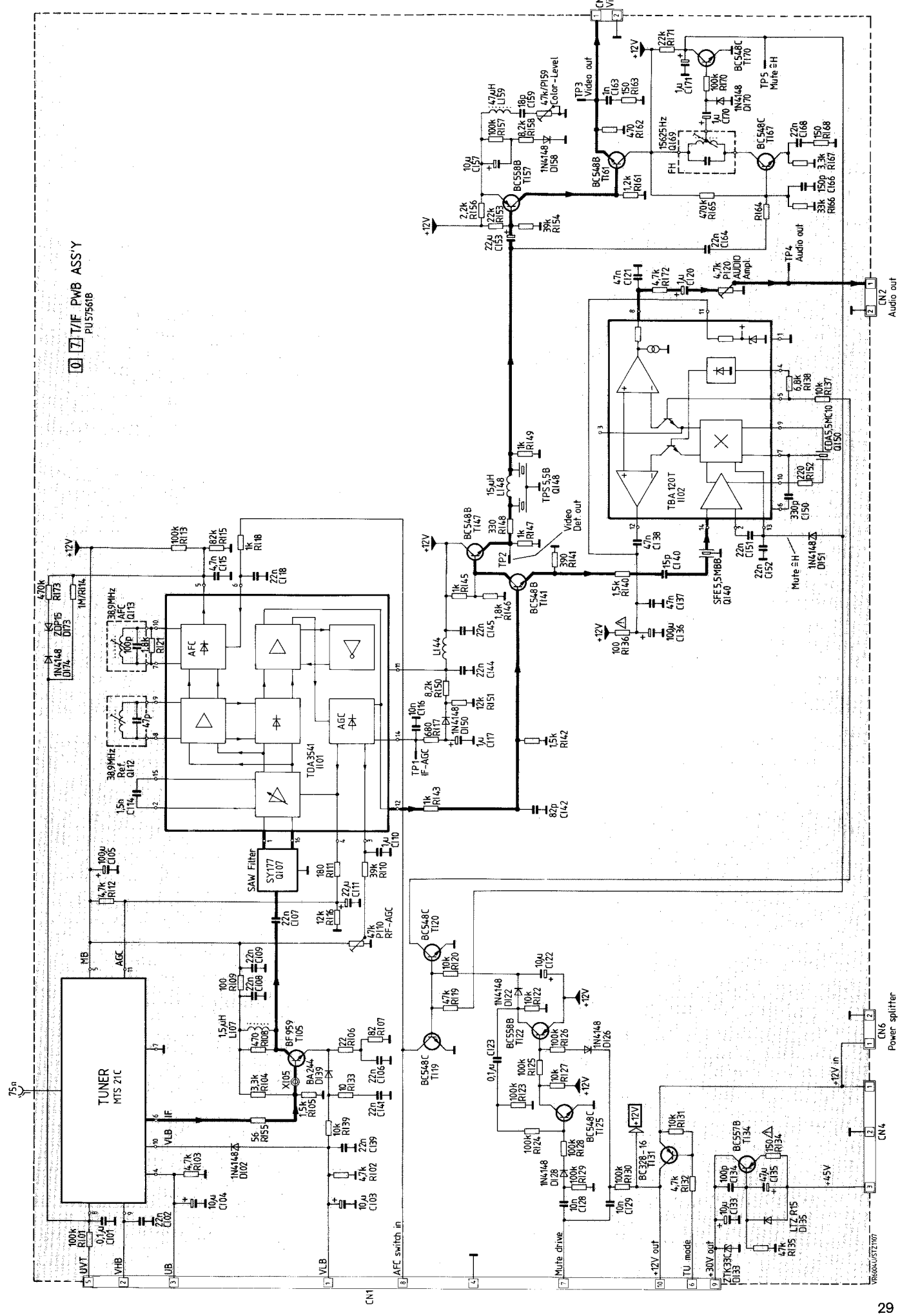
Typ -C-, -D-




**Note:** Unless otherwise specified
1. All resistance values are in ohms (1/6 W, 1/8 W)
2. All inductance values are in μH
3. All capacitance values are in μF
4. Voltages are DC-measured with a digital voltmeter during STOP without signal.
5. Shaded ( ) parts are critical for safety Replace only with specified part numbers

# Schaltbild Tuner/ZF Version 2
# Circuit diagram Tuner/IF performance 2

**Typ -C-, -D-**



# Ersatzteile · Spare parts · Pièces de rechange

| Position | PG | Bestell-Nr. | Bezeichnung | Item | Description |
|---|---|---|---|---|---|
| | | | GEHÄUSETEILE | CABINET PARTS | PIECES DU BOITIER |
| 1 | Z | 339.134.411 | Frontabdeckung(925U) | front cover assy.(925U) | platine frontale(925U) |
| 1 | Z | 339.134.412 | Frontabdeckung(930U) | front cover assy.(930U) | platine frontale(930U) |
| 3 | I | 339.874.419 | Anschlußplatte | connector panel | plaque de branchement |
| 11 | A | 339.234.316(a) | Schalterabdeckung | switch cover | cache de commutateurs |
| 18 | J | 339.174.407 | Kassettenfachabdeckung,oben | U.door assy. | couvercle comp.cassette,haut |
| 20 | D | 339.174.408 | Kassettenfachabdeckung,unten | L.door | couvercle comp.cassette,bas |
| | | | CHASSISTEILE | CHASSIS PARTS | PIECES DU CHASSIS |
| 48 | R* | 339.874.420 | Kunststoffscharnier | hinge | charnière en plastique |
| | | | MECH.TEILE | MECHANISM ASSY. | PIECES MECANIQUES |
| 69 | H | 339.769.407 | Zwischenrad | reel idler | roue intermediaire |
| | | | CASSETTENAUFNAHME | CASSETTE HOUSING ASSY. | CHARGEUR DE CASSETTE |
| 33 | D | 339.874.421 | Cassettenhalter | cassette holder | support de cassette |
| 38 | A | 339.169.403 | Montageplatte,rechts | R.bracket | plaque de montage,droite |
| 41 | A | 339.829.428 | Verriegelungshebel,rechts | R.lock lever assy. | levier de verrouillage,droit |
| 43 | W* | 339.829.429 | Verriegelungshebel,links | L.lock lever assy. | levier de verrouillage,gauche |
| 63 | N* | 339.590.166 | Keramik-Kondensator | ceramic capacitor | condensateur céramique |
| | Z | 339.334.443(a) | Tuner(PU 34219-8-1) | tuner(PU 34219-8-1) | tuner(PU 34219-8-1) |
| T 6 | I | 339.349.424 | Spule | coil | bobine |
| | | | Tuner-ZF-Platte,"Orega" | Tuner-IF board,"Orega" | Bloc tuner-FI,"Orega" |
| | | 339.339.514 | Tuner "MTS 21 C" | tuner "MTS 21 C" | tuner "MTS 21 C" |
| II 01 | | 339.575.912 | IC-TDA 3541 | IC-TDA 3541 | IC-TDA 3541 |
| II 02 | E | 309.368.268 | IC-TBA 120 T | IC-TBA 120 T | IC-TBA 120 T |
| DI 02/22 26/28/ 50/51/ 58/70 | R* | 309.325.927 | Diode 1 N 4148 | diode 1 N 4148 | diode 1 N 4148 |
| DI 33 | | 339.529.766 | Diode ZTK 33 C DPD | diode ZTK 33 C DPD | diode ZTK 33 C DPD |
| DI 35 | | 339.529.765 | Diode LTZ-MR 15 | diode LTZ-MR 15 | diode LTZ-MR 15 |
| DI 39 | R* | 309.325.153 | Diode BA 244 | diode BA 244 | diode BA 244 |
| TI 05 | B | 309.001.283 | Transistor BF 959 | transistor BF 959 | transistor BF 959 |
| TI 19/20 25/67/70 | R* | 339.556.224 | Transistor BC 548 C | transistor BC 548 C | transistor BC 548 C |
| TI 22/57 | U* | 309.001.226 | Transistor BC 558 B | transistor BC 558 B | transistor BC 558 B |
| TI 31 | D | 339.556.261 | Transistor BC 328-16 | transistor BC 328-16 | transistor BC 328-16 |
| TI 34 | P* | 309.001.281 | Transistor BC 557 B | transistor BC 557 B | transistor BC 557 B |
| TI 41/47/ 61 | F | 339.556.087 | Transistor BC 548 B | transistor BC 548 B | transistor BC 548 B |
| PI 10 | R* | 309.509.127 | Einsteller 47 KOhm | var.resistor 47 KOhm | résistance var.47 KOhm |
| PI 20/59 | | 339.509.511 | Einsteller 4,7 KOhm | var.resistor 4,7 KOhm | résistance var.4,7 KOhm |
| QI 07 | | 339.369.511 | Oberflächen-Wellenfilter | saw filter | filtre d'harmoniques |
| QI 12/13 | | 309.369.512 | Filter 38,9 MHz | filter 38,9 MHz | filtre 38,9 MHz |
| QI 40 | C | 309.160.831 | Keramikfilter 5,5 MHz | ceramic filter 5,5 MHz | filtre céramique 5,5 MHz |
| QI 48 | | 339.369.515 | Keramikfilter 5,5 MHz | ceramic filter 5,5 MHz | filtre céramique 5,5 MHz |
| QI 50 | B | 309.160.820 | Keramikfilter CDA 5,5 MHz | ceramic filter CDA 5,5 MHz | filtre céramique CDA 5,5 MHz |
| QI 69 | | 339.369.518 | Filter | filter | filtre |
| LI 05 | | 339.349.508 | Drosselspule 1 uH | choke coil 1 uH | bobine de self 1 uH |
| LI 07 | | 339.349.509 | Drosselspule 1,5 uH | choke coil 1,5 uH | bobine de self 1,5 uH |
| LI 44 | | 339.349.511 | Drosselspule | choke coil | bobine de self |
| LI 48 | | 339.349.510 | Drosselspule 15 uH | choke coil 15 uH | bobine de self 15 uH |
| LI 59 | | 339.349.512 | Drosselspule 47 uH | choke coil 47 uH | bobine de self 47 uH |

**Hinweis:** Alle weiteren Teile siehe Ersatzteile für 925/930, Bestell-Nr. 319 480 928
**Note:** All further spare parts see spare parts for 925/930, print. No. 319 480 928
**Remarque:** Pour d'autres pièces de réchange voir pièces de réchange pour 925/930, Référence: 319 480 928

Änderungen vorbehalten.
Subject to modifications.
Modifications réservées.

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